



A collaboration between AWI, GRDC, MLA, RIRDC and Dairy Australia

Plantain

Scientific name(s)

Plantago lanceolata

Strengths

- Fast establishing
- Tolerant of drought and low fertility
- Excellent feeding value including summer

Limitations

- Susceptible to broad leaf herbicides
- Slow growth in winter

Plant description

Plant: erect, leafy, perennial herb with a deep, dense, branching fibrous root system

Leaves: rosette of broad leaves from central crown. Leaves up to 25 cm long, often purplish at the base and each with 3 - 5 longitudinal ribs. Fine hairs on upper surface; hairy along the lower side ribs

Flowers: tiny, four parted, creamy-white flowers with long stamens. Flowers during midsummer. Flower stems are erect, furrowed, leafless, and up to 50 cm long

Seedhead: a single spike per stem, up to 2.5 cm long, cone-shaped or cylindrical, very compact grey-green turning dark brown-black on ripening

Seeds: ~ 1 mm and oval; black-brown. 500,000/kg

Pasture type and use

Valuable component of permanent pastures and specialist summer pastures

Where it grows

Rainfall

>600 mm

Soils

Tolerates a broad range of soil types, fertility and pH.

Temperature

Wide climate adaption; tolerant of frost; relatively heat tolerant.

Establishment

Companion species

Grasses: phalaris, cocksfoot, tall fescue, Bromus spp

Legumes: sub, white and red clover

Fodder crops: Brassica spp.

Sowing/planting rates as single species

5 - 10 kg/ha.

Sowing/planting rates in mixtures

5-10 with specialist clover pastures

2- 4 kg/ha with grass pastures or Brassica fodder spp.

Sowing time

Sow in autumn/spring after pre-emergent weed control

Inoculation

Not applicable

Fertiliser

Sow with ~10-15 kg P/ha

Management

Maintenance fertiliser

10 kg P/ha

Grazing/cutting

Can tolerate continuous and close grazing. Graze rotationally to gain maximum production. A 3-4 week rotation in late spring will maintain seed head palatability. Can use for silage/hay.

Seed production

Free seeding

Ability to spread

Yes. Regenerates from self-sown seed. Is a widely naturalised species

Weed potential

Pollen contains allergens associated with asthma and bronchitis

Major pests

Red-legged earthmite, slugs, snails

Major diseases

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Herbicide susceptibility

Glyphosate and phenoxy-based chemicals (2,4-D, MCPA)

Animal production

Feeding value

Good quality feed - see grazing note re late spring. High mineral concentrations include copper, zinc, selenium, cobalt. This widely used medicinal herb contains various secondary metabolites with recognised tonic and anti-biotic properties; these may benefit stock/rumen flora

Palatability

Highly palatable

Production potential

Good spring-autumn production

Livestock disorders/toxicity

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Cultivars

Cultivar	Seed source/Information
Grasslands Lancelot	PGG Seeds
Ceres Tonic 	PGG Seeds

 Denotes that this variety is protected by Plant Breeder's Rights Australia

Further information

Weblink:
NSWDPI - Narrow leaf plantain

Acknowledgements

PGG Seeds, DPIs

Author and date

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